Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A data storage system comprising:

a first non-volatile mass storage device that can be placed in an available state and an unavailable state and having a first range of logical addresses;

a second non-volatile mass storage device having a faster access time and a lower capacity than the first non-volatile mass storage device and having a second range of logical addresses; and

a storage controller that can access data within the second non-volatile mass storage device when the first non-volatile mass storage device is in the unavailable state and operable to access data within both the first and second non-volatile mass storage devices when the first non-volatile mass storage device is in the available state;

wherein the first range of logical addresses and the second range of logical addresses are overlapping with each other.

- 2. (Original) The data storage system of claim 1, wherein the unavailable state is activated when the data storage system enters a portable mode.
- 3. (Original) The data storage system of claim 2, wherein the portable mode is determined with motion detection circuitry.
- 4. (Original) The data storage system of claim 1, wherein a portion of the second range of logical addresses is non-overlapping with the first range of addresses, whereby the portion of the second range of addresses contains data that does not also reside on the first non-volatile mass storage device.

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- 5. (Original) The data storage system of claim 1, wherein the storage controller synchronizes the data contained in the second range of addresses on the second non-volatile mass storage device with the first range of addresses on the first non-volatile mass storage device after the first non-volatile mass storage device transitions out of the unavailable state to the available state.
- 6. (Original) The data storage system of claim 1, wherein the second non-volatile mass storage device is capable of acting as a cache for the first non-volatile mass storage device when the first non-volatile mass storage device is in the available state.
- 7. (Original) The data storage system of claim 1, wherein the first non-volatile mass storage device uses a magnetic hard disk to store data and the second non-volatile mass storage device uses a flash memory array to store data.
- 8. (Currently Amended) A data storage system comprising:
- a first non-volatile mass storage device that has a first range of logical addresses;
- a second non-volatile mass storage device having a faster access time and a lower capacity than the first non-volatile mass storage device and having a second range of logical addresses, the first range of logical addresses and the second range of logical addresses overlapping with each other; and
- a storage controller that directs incoming data into either the first non-volatile mass storage device or the second non-volatile mass storage device;

wherein after data has been directed into the second non-volatile mass storage device, the data is copied from the second non-volatile mass storage device into the first non-volatile mass storage device; and

wherein the storage controller's choice of which non-volatile mass storage device to direct incoming data into is at least partially dependant upon the amount of data in the second non-volatile mass storage device that has not been copied into the first non-volatile <u>mass</u> storage device.

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9. (Original) The data storage system of claim 8, wherein the data is copied from the second non-volatile mass storage device into the first non-volatile mass storage device during periods of inactivity.

10. (Original) The data storage system of claim 8, wherein:

the second non-volatile mass storage device experiences periods of inaccessibility; and

the storage controller directs data into the first non-volatile mass storage device when the second non-volatile mass storage device is in a period of inaccessibility.

- 11. (Original) The data storage system of claim 10, wherein the periods of inaccessibility are caused, at least in part, by garbage collection operations.
- 12. (Original) The data storage system of claim 10, wherein data in the second non-volatile mass storage device is stored in a cyclic buffer arrangement.
- 13. (Original) The data storage system of claim 8, wherein the first non-volatile mass storage device uses a magnetic hard disk to store data and the second non-volatile mass storage device uses a flash memory array to store data.

14. (Original) A data storage system comprising:

a first non-volatile mass storage device that has a first range of logical addresses;

a second non-volatile mass storage device having a faster access time and a lower capacity than the first storage device and having a second range of logical addresses, the first range of logical addresses and the second range of logical addresses overlapping with each other; and

a storage controller that satisfies data requests with data that is stored in the second non-volatile mass storage device or, if the requested data is not present in the

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second non-volatile mass storage device, with data that is stored in the first non-volatile mass storage device.

- 15. (Original) The data storage system of claim 14, wherein data is copied from the first non-volatile mass storage device to the second non-volatile mass storage device according to frequency with which the data is read.
- 16. (Original) The data storage system of claim 14, wherein data is copied from the first non-volatile mass storage device to the second non-volatile mass storage device according to the nature of the data that is being read.
- 17. (Original) The data storage system of claim 14, wherein data in the second non-volatile mass storage device is stored in a cyclic buffer arrangement.
- 18. (Original) The data storage system of claim 14, wherein the first non-volatile mass storage device uses a magnetic hard disk to store data and the second non-volatile mass storage device uses a flash memory array to store data.

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